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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,628	11/18/2003	Koji Mackawa	107156-00211	3249

7590 12/16/2005

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EXAMINER

ENSEY, BRIAN

ART UNIT PAPER NUMBER

2646

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/714,628	MAEKAWA, KOJI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Brian Ensey	2646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 7,9,10,12 and 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7,9 and 15 is/are allowed.
- 6) ☒ Claim(s) 10,12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/22/05</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata U.S. Patent No. 4,654,883 in view of Fukada U.S. Patent No. 6,456,721.

Regarding claim 10, Iwata discloses a method of using a listening device having an actuator for conducting a voice signal through a human bone when contacting the actuator to a human body, comprising the steps of: contacting a holder for holding said actuator to a human body part at two points, one at a contact part of said actuator ( 17) and the other at another contact part at a spaced apart location from the contact part of said actuator (18); and rotating and supporting said holder around a shaft in a pivot part between said contact parts, said shaft being orthogonal to a plane containing said contact parts and said pivot part (16); and pressing said holder against the human body part with a pressure and retaining said holder at a given location (headband 11 provides pressure of actuator against the human body and retains the actuator in place along with second contact element 18) (See Figs. 1-3 and col. 3, lines 6-21 and lines 30-48). Iwata does not teach the bone conduction device is a speaker. However, Iwata teaches the bone conduction device is a microphone and it is well known in the art that a bone conduction microphone and bone conduction speaker may be used interchangeably and it is also well known to use both bone conduction devices in a common listening device as taught by Fukada (See Fukada Fig. 4 and col. 4, lines 22-27). Therefore, it would have been obvious to one

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of ordinary skill in the art at the time of the invention to provide a bone conduction speaker of the same configuration as disclosed by Iwata for the speaker of Iwata to allow for use for long periods of time without discomfort (See Fukada col. 1, lines 49-55).

Regarding claim 12, the combination of Iwata in view of Fukada further discloses said actuator is of a type selected from the group consisting of electromotive, piezoelectric, electromagnetic, and magnetostrictive actuators (See Iwata Fig. 3 and col. 3, lines 36-44).

***Allowable Subject Matter***

Claims 7, 9 and 15 are allowed.

***Response to Arguments***

Applicant's arguments with respect to claims 10 and 12 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Ensey whose telephone number is 571-272-7496. The examiner can normally be reached on Monday - Friday 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

**Any response to this action should be mailed to:**

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Commissioner of Patents and Trademarks  
Washington, D.C. 20231


**Or faxed to:**

(571) 273-8300, for formal communications intended for entry and for informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand-delivered responses should be brought to: Customer Service Window, Randolph Building, 401 Dulany Street, Arlington, VA 22314

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BKE  
November 28, 2005

  
**SINH TRAN**  
**SUPERVISORY PATENT EXAMINER**